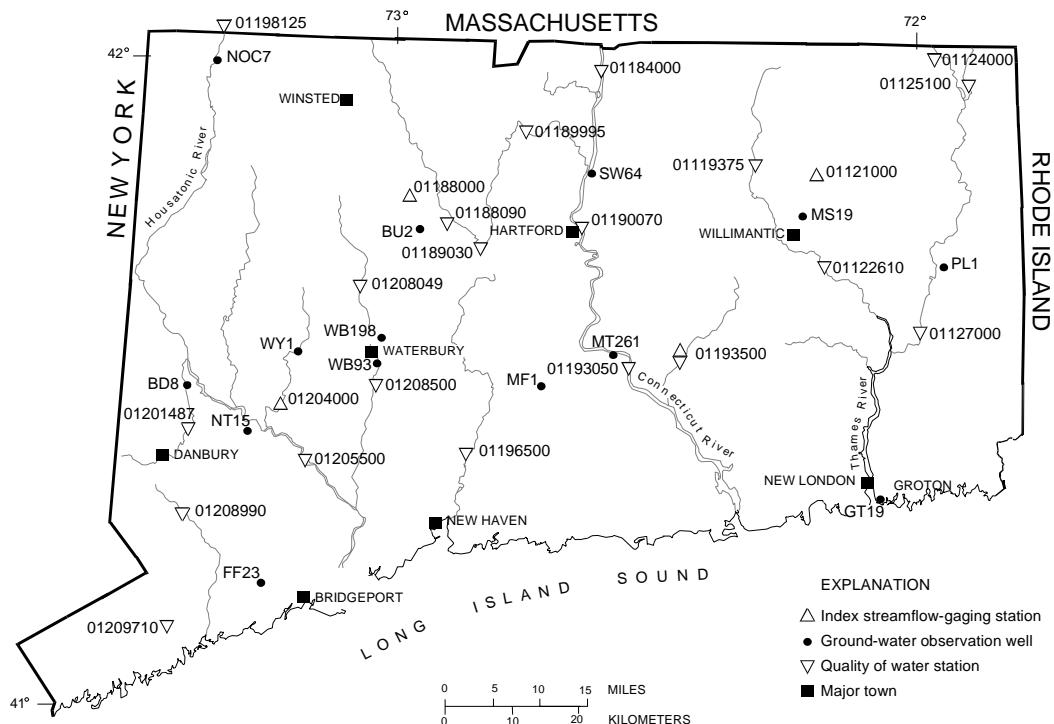


**U.S. Department of the Interior
U.S. Geological Survey**

**WATER-RESOURCES CONDITIONS
IN CONNECTICUT, OCTOBER 1999**

The USGS provides maps, reports, and information to help others manage, develop, and protect America's water, energy, mineral, land, and biological resources.



DATA-COLLECTION SITES USED IN THIS REPORT

This report contains a small part of the ground-water, surface-water, and water-quality data collected by the USGS at sites in Connecticut. More complete information may be found in the annual Water-Data Report. Data for this report were collected by the USGS in cooperation with the Connecticut Dept. of Environmental Protection.

For more information on USGS programs in Connecticut, please contact Virginia de Lima (District Chief); 101 Pitkin St., East Hartford, CT 06108; phone (860) 291-6740; fax (860) 291-6799; dc_ct@usgs.gov

Additional earth science information, including this document, is on the USGS Home Page on the World Wide Web at <http://www.usgs.gov> or the Connecticut District home page at <http://ct.water.usgs.gov>. For more information on all USGS reports and products (including maps, images, and computerized data), call 1-888-ASK-USGS.

INDEX TO INFORMATION

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STREAMFLOW (measured in cubic feet per second)

→ PROVISIONAL DATA ←

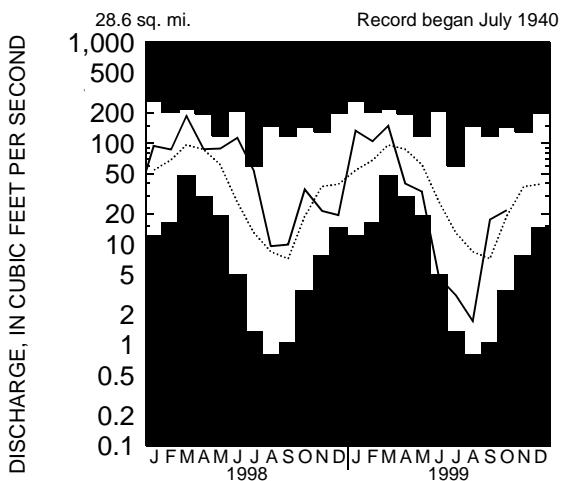
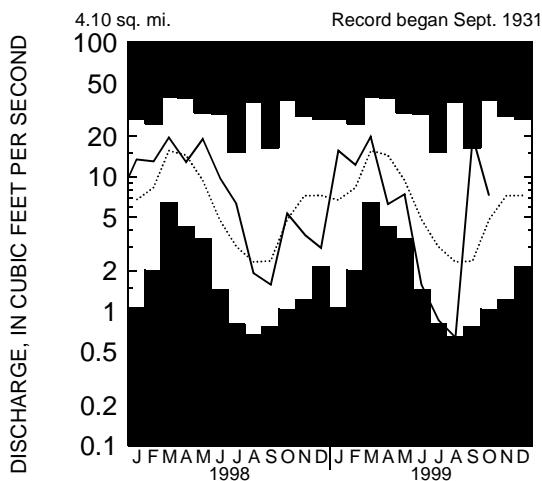
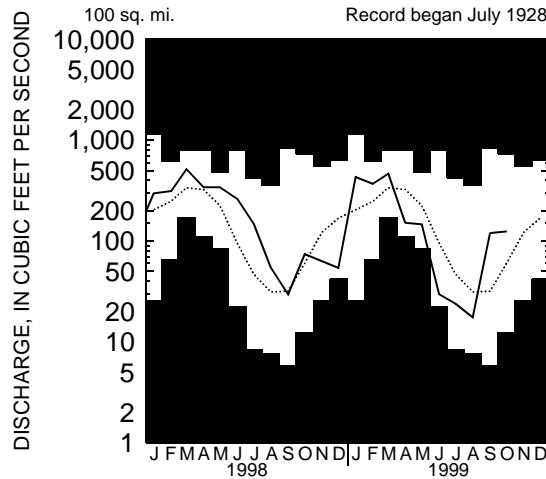
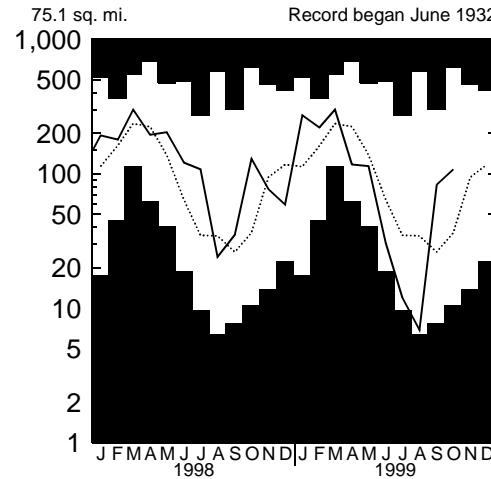
Streamflows in October were in the normal to above-normal range for the entire State. Flow in Mount Hope River (NE Connecticut) remained in the normal range for the 2nd consecutive month. Flow in Burlington Brook (NW Connecticut) remained above normal for the 2nd consecutive month. Flow in the Salmon River (SE Connecticut) remained above normal for the 2nd consecutive month. Flow in the Pomperaug River (SW Connecticut) remained above normal for the 2nd consecutive month. Across the State, mean streamflow for October averaged 193 percent of the October long-term median value.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	OCT. 1999 MEAN	SEPT. 1999 MEAN	OCT. 1998 MEAN	OCT. MAXIMUM VALUE (year recorded)	OCT. MINIMUM VALUE (year recorded)	OCT. MEDIAN (1961-90)
MT HOPE RIVER (01121000)	21.8	17.7	34.8	144	1956	18.8
BURLINGTON (01188000)	7.24	19.8	5.34	37.6	1956	4.82
SALMON RIVER (01193500)	125	120	74.4	734	1956	12.4
POMPERAUG (01204000)	108	82.9	129	625	1956	10.4

MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

█ Shaded areas on graphs show highest and lowest monthly mean discharge of record.

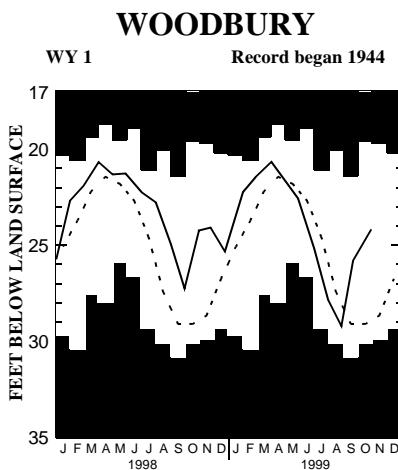
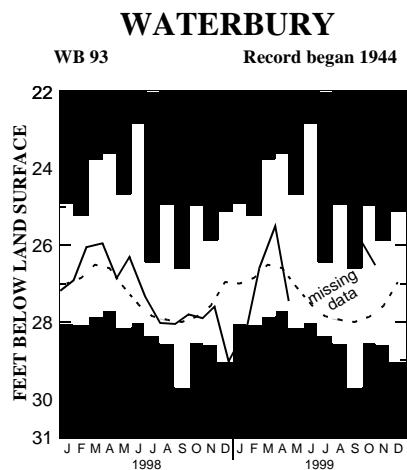
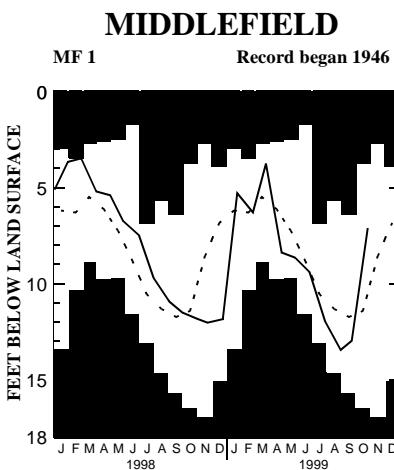
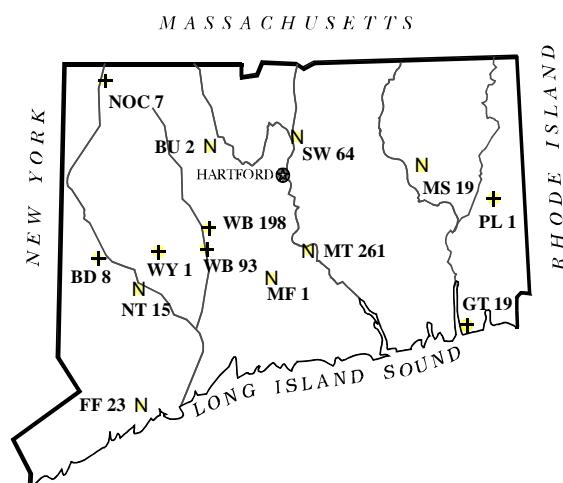
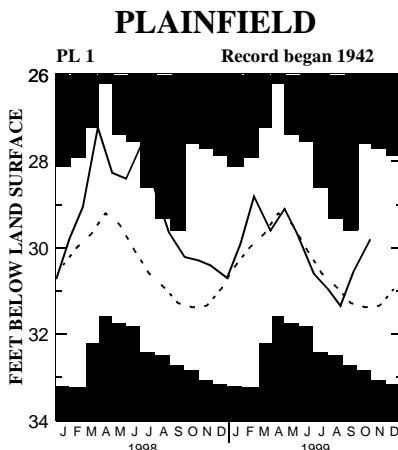
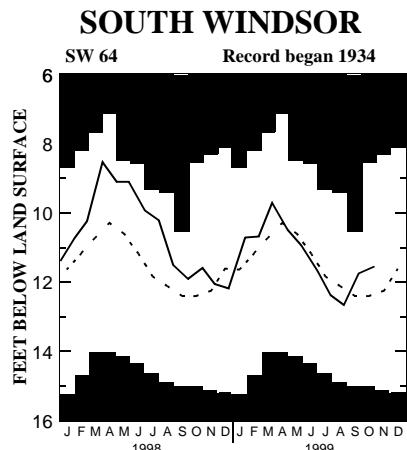
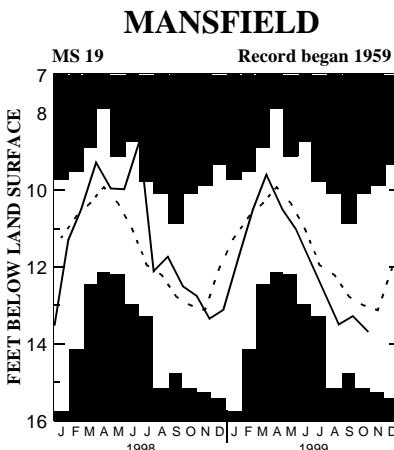
— Current record Median (1961-1990)

MOUNT HOPE RIVER NEAR WARRENVILLE**BURLINGTON BROOK NEAR BURLINGTON****SALMON RIVER NEAR EAST HAMPTON****POMPERAUG RIVER AT SOUTHBURY**

GROUND-WATER LEVELS (see table at end of report)

(Status of ground-water storage as indicated by water level changes in observation wells,
as shown on hydrographs)

- Shaded area on graphs show highest and lowest water levels of record through calendar year 1998.
- Solid line shows current water levels.
- Dashed line is monthly median for period of record through calendar year 1998.



ABOVE NORMAL

Within the highest 25%
of record for this month.



NORMAL RANGE

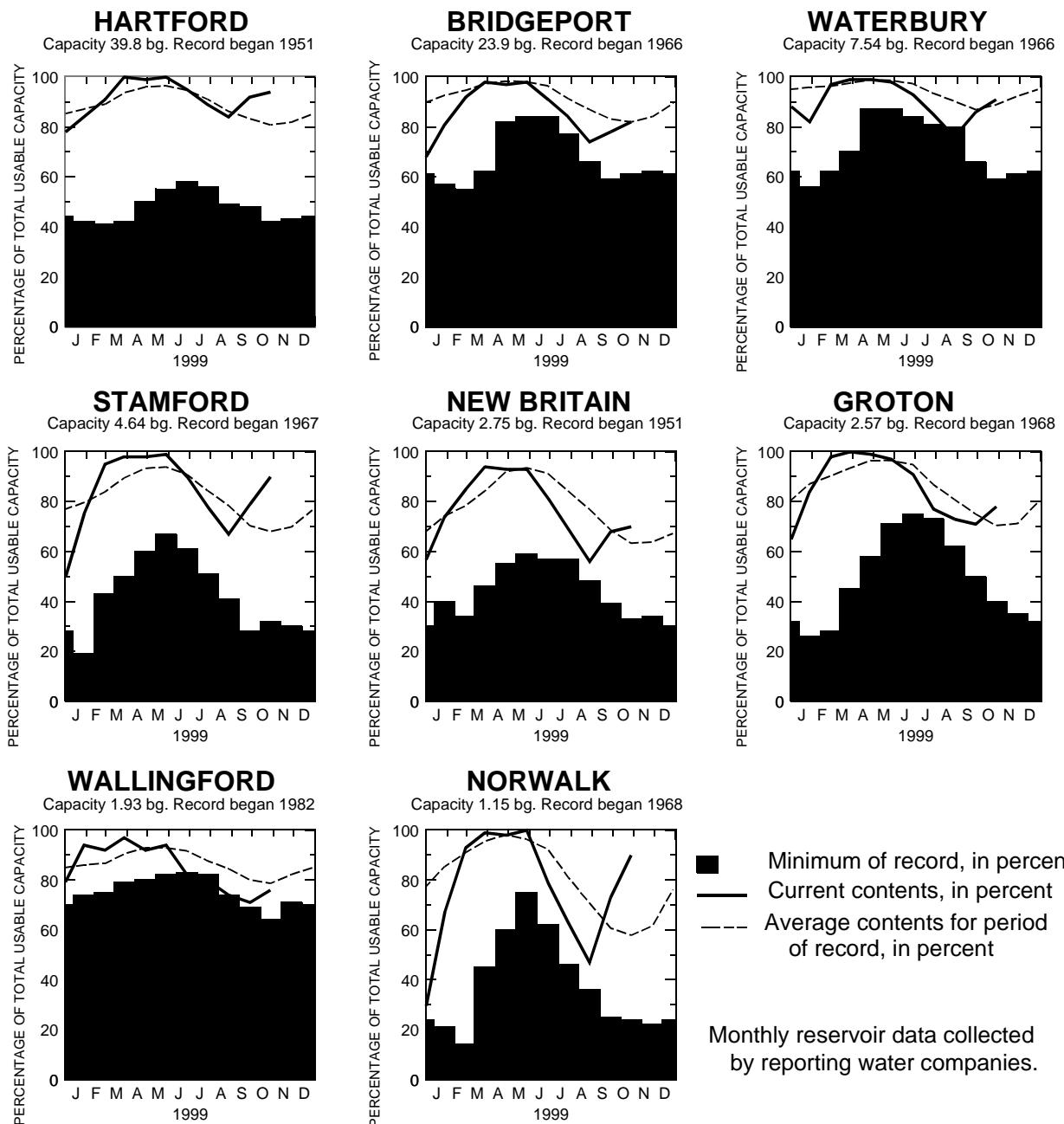
Between the highest and lowest 25%
of record for this month.



BELOW NORMAL

Within the lowest 25%
of record for this month.



RESERVOIRS (Contents in billion gallons)

RESERVOIR SYSTEM (usable capacity, in billion gallons)	SEPT. CAPACITY (PERCENT)	OCT. CAPACITY (PERCENT)	LONG-TERM AVERAGE CAPACITY FOR OCT. (PERCENT)
Hartford (39.8 bg)	92	94	81
Bridgeport (23.9 bg)	78	82	82
Waterbury (7.54bg)	86	91	89
Stamford (4.64 bg)	79	90	68
New Britain (2.75 bg)	68	70	63
Groton (2.57 bg)	71	78	70
Wallingford (1.93 bg)	71	76	79
Norwalk (1.15 bg)	73	90	58

CHEMICAL, PHYSICAL, AND BACTERIOLOGICAL QUALITY OF SELECTED STREAMS IN CONNECTICUT

[Station locations shown on front page; --, not applicable; streamflow measured in instantaneous cubic feet per second; % flow duration is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; bacteriological analysis reconnaissance data enumerated using membrane filter method with immediate incubation; col/100 mL, colonies per 100 milliliters; K, results based on colony count outside the acceptable range (non-ideal colony count)]

USGS WATER-QUALITY STATION NAME AND NUMBER	SAMPLE DATE IN 1999	STREAMFLOW/ % FLOW DURATION	SPECIFIC CONDUCTANCE (in $\mu\text{S}/\text{cm}$ at 25°C)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN CONCENTRATION (mg/L)	FIELD PH	FECAL COLIFORM (COL/100 mL)	ENTEROCOCCI (COL/100 mL)
01119375 Willimantic R. at Merrow								
								SITE NOT SAMPLED THIS MONTH
01122610 Shetucket R. at South Windham	10/13	254/--	134	13.0	10.4/100	6.85	660	52
01124000 Quinebaug R. at Quinebaug								
								SITE NOT SAMPLED THIS MONTH
01125100 French R. at North Grosvenordale								
								SITE NOT SAMPLED THIS MONTH
01127000 Quinebaug R. at Jewett City								
								SITE NOT SAMPLED THIS MONTH
01184000 Connecticut R. at Thompsonville	10/5	11900/47	115	15.0	9.8/97	7.68	480	70
01188090 Farmington R. at Unionville	10/26	714/25	90	9.5	11.7/103	7.36	12K	18K
01189030 Pequabuck R. at Farmington	10/4	82.4/--	291	13.5	9.0/86	7.05	540	760
01189995 Farmington R. at Tariffville	10/26	1070/36	115	10.0	10.8/96	6.97	270	40
01190070 Connecticut R. at Hartford	10/18	--/--	124	13.5	9.5/92	7.11	148	57
01193050 Connecticut R. at Middle Haddam	10/18	--/--	127	14.5	9.3/92	7.10	124	59
01193500 Salmon R. near East Hampton	10/13	73.0/64	114	10.0	11.5/102	6.97	42	26
01196500 Quinnipiac R. at Wallingford	10/28	188/39	285	10.0	11.1/96	7.61	3500	232
01198125 Housatonic R. near Ashley Falls, MA								
								SITE NOT SAMPLED THIS MONTH
01201487 Still R. at Rt. 7 at Brookfield Center								
								SITE NOT SAMPLED THIS MONTH
01205500 Housatonic R. at Stevenson								
								SITE NOT SAMPLED THIS MONTH
01208049 Naugatuck R. near Waterville								
								SITE NOT SAMPLED THIS MONTH
01208500 Naugatuck R. at Beacon Falls								
								SITE NOT SAMPLED THIS MONTH
01208990 Naugatuck R. near Redding	10/25	33.5/41	187	9.5	11.1/98	7.56	22	11K
01209710 Norwalk R. near Winnipauk	10/25	44.0/--	297	9.0	12.8/110	7.70	104	34K

PROVISIONAL DATA

U.S. GEOLOGICAL SURVEY—OCTOBER 1999

GROUND-WATER LEVELS

We are now including data from all 69 wells in our ground-water network. Three wells recorded new highs for October.

Ground-water levels are in feet below land surface. Statistics are based on period of record (through calendar year 1998). Ground-water level data collected by USGS personnel and individual observers.

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE							NEW RECORD	YR RECORD BEGAN
	OCT. 1999 (DATE)	SEPT. 1999	OCT. 1998	OCT. MAX	OCT. MIN (YR RECORDED)	OCT. MEDIAN			
BD 8 (Brookfield)	30.09	28	31.08	32.60	27.61	33.00	1981	31.85	
BU 2 (Burlington)	30.04	27	26.88	32.69	16.01	35.40	1957	28.55	
CL 223 (Clinton)	5.37	26	6.47	9.97	5.37	12.43	1997	8.63	> 1991
CL 224 (Clinton)	21.69	26	21.73	22.26	21.23	23.11	1997	22.03	
CL 225 (Clinton)	5.89	26	7.26	6.47	5.75	9.72	1997	6.75	
CO 335 (Colchester)	7.05	25	7.15	7.61	6.24	8.25	1986	7.60	
CV 51 (Coventry)	5.54	27	5.78	6.92	4.60	7.08	1997	5.75	
D 116 (Durham)	1.61	25	8.39	5.70	0.33	8.84	1986	3.77	
D 117 (Durham)	11.24	25	12.36	11.48	6.69	13.84	1986	11.18	
D 119 (Durham)	0.25	25	1.22	0.67	0.15	2.69	1986	0.81	
D 120 (Durham)	2.28	25	3.04	2.58	1.40	3.56	1986	2.60	
EL 82 (Ellington)	5.89	27	5.72	6.29	5.62	6.40	1997	6.27	
EL 139 (Ellington)	24.75	27	dry	dry	0.00	32.41	1994	19.68*	
EL 140 (Ellington)	16.35	27	14.57	19.32	12.94	21.04	1997	19.32	
EW 133 (East Windsor)	5.18	27	5.00	5.44	4.58	5.66	1988	5.44	
EW 134 (East Windsor)	51.63	27	51.64	50.91	49.48	51.60	1986	51.14	
FF 23 (Fairfield)	7.85	28	7.75	8.34	7.03	9.12	1997	8.02	
FF 30 (Fairfield)	8.85	28	11.55	12.30	1.25	12.41	1995	10.66	
FF 31 (Fairfield)	8.50	29	7.90	obstructed	4.43	10.69	1997	8.04	
FF 32 (Fairfield)	7.68	28	11.70	13.44	5.52	13.44	1998	11.23	
FF 33 (Fairfield)	5.32	28	5.60	5.96	4.68	6.65	1994	5.57	
GR 328 (Granby)	11.99	27	12.21	15.99	11.83	17.44	1988	15.35	
GR 329 (Granby)	4.63	27	2.49	10.85	3.75	12.91	1988	8.71	
GR 330 (Granby)	2.41	27	2.15	3.05	2.40	4.12	1982	3.35	
GR 331 (Granby)	5.74	27	8.40	9.76	9.33	11.13	1986	9.98	
GT 19 (Groton)	15.00	31	15.63	16.52	13.35	17.77	1963	16.36	
HM 445 (Hamden)	23.49	28	30.12	28.34	28.34	32.25	1993	29.53	
HM 446 (Hamden)	3.32	28	3.54	3.81	3.32	3.97	1994	3.89	> 1993
HM 447 (Hamden)	2.74	28	3.04	3.45	2.52	3.76	1997	3.59	
HM 448 (Hamden)	13.10	28	13.41	14.08	12.22	14.38	1997	14.08	
HM 449 (Hamden)	14.90	28	14.70	17.30	14.90	20.25	1997	17.30	> 1993
HM 450 (Hamden)	12.57	28	11.90	13.23	12.43	13.53	1997	13.34	
MB 32 (Marlborough)	4.25	25	6.29	6.73	1.36	10.80	1997	7.79	
MB 35 (Marlborough)	15.00	25	16.76	14.80	9.55	18.74	1993	15.29	
MB 36 (Marlborough)	3.10	25	5.51	4.97	2.64	8.93	1997	5.54	
									1993

New records: >, new record high for October; >>, new record low for period of record.

*, median not calculated; number shown is mean.

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE								NEW RECORD	YR RECORD BEGAN
	OCT. 1999 (DATE)	SEPT. 1999	OCT. 1998	OCT. MAX	OCT. MIN (YR RECORDED)	OCT. MEDIAN				
MF 1 (Middlefield)	7.09	25	12.97	11.83	3.70	16.44	1964	11.43		1946
MS 19 (Mansfield)	13.69	26	13.28	12.75	9.86	15.12	1965	13.18		1958
MS 44 (Mansfield)	2.49	26	3.91	4.97	1.40	9.63	1997	5.44		1982
MS 45 (Mansfield)	12.79	27	13.09	12.78	11.65	13.97	1997	13.03		1987
MS 46 (Mansfield)	14.35	27	10.93	14.10	13.29	14.60	1993	14.05		1987
MS 74 (Mansfield)	8.10	27	9.22	8.10	2.73	10.85	1997	8.16		1992
MS 75 (Mansfield)	17.62	27	13.87	17.92	12.87	19.83	1997	18.56		1992
MS 76 (Mansfield)	34.00	27	33.90	obstructed	13.58	35.92	1993	33.63		1992
MS 77 (Mansfield)	7.73	27	9.30	8.00	2.70	10.68	1997	7.70		1993
MT 261 (Middletown)	22.61	25	23.62	21.93	19.48	26.92	1964	24.00		1956
NHV 201 (North Haven)	16.64	28	17.19	16.60	14.83	18.25	1986	16.69		1982
NHV 202 (North Haven)	47.91	28	50.37	47.60	0.00	58.90	1995	49.52		1983
NOC 7 (North Canaan)	9.38	29	9.20	9.58	8.20	10.54	1997	9.58		1958
NSN 77 (N. Stonington)	13.75	26	15.68	15.56	10.09	17.33	1993	14.96		1991
NSN 78 (N. Stonington)	4.18	26	4.68	4.26	3.85	5.03	1993	4.27		1991
NT 15 (Newtown)	4.46	28	5.25	6.22	1.88	11.14	1988	7.88		1966
PL 1 (Plainfield)	29.80	26	30.51	30.30	27.59	32.80	1965	31.22		1942
SB 30 (Southbury)	19.70	28	21.86	20.13	16.90	22.13	1995	20.57		1979
SB 39 (Southbury)	6.64	28	4.33	6.73	4.96	7.68	1997	7.05		1991
SB 41 (Southbury)	50.72	28	56.06	49.51	45.65	54.72	1995	49.92		1991
SB 42 (Southbury)	13.96	28	22.08	14.64	12.10	19.30	1997	15.61		1993
SC 19 (Scotland)	2.85	26	3.66	8.66	2.01	11.47	1986	8.33		1983
SC 20 (Scotland)	7.72	26	8.27	obstructed	4.72	11.76	1993	10.24		1983
SC 21 (Scotland)	0.89	26	1.07	0.94	0.40	1.74	1997	0.94		1983
SC 22 (Scotland)	12.60	26	12.97	13.70	11.05	14.57	1993	13.74		1984
SC 23 (Scotland)	2.21	26	2.34	2.14	1.38	2.84	1994	2.04		1984
SM 7 (Salem)	12.41	26	12.50	13.02	7.40	13.90	1997	13.19		1979
SW 64 (S. Windsor)	11.55	27	11.75	11.59	8.53	14.99	1966	12.40		1934
SY 15 (Salisbury)	15.13	27	15.13	15.63	13.63	16.99	1993	15.33		1966
SY 23 (Salisbury)	6.30	27	7.25	9.12	5.15	15.22	1993	7.94		1987
SY 24 (Salisbury)	13.76	27	15.80	15.08	10.09	18.80	1997	13.42		1986
WB 93 (Waterbury)	26.52	28	25.70	24.24	24.96	28.53	1964	27.85		1943
WB 198 (Waterbury)	14.45	28	16.50	18.85	9.04	21.76	1988	17.49		1943
WY 1 (Woodbury)	24.17	28	25.77	24.24	19.56	30.81	1981	29.10		1913

New records: >, new record high for October; >>, new record high for period of record.

*, median not calculated; number shown is mean.